



ORRCO OOO-145B Preliminary Results

Megan Pickett to: Bruce Long

Cc: Karen Norton

04/22/2010 03:22 PM

Hello Bruce, Steve is making me look bad by getting in his preliminaries like he's using a triquarter (sp?). May the force be with you. No, that's the other one... Enjoy.

10144400	ND
10144401	1.5 mg/kg 1260
10144402	160 mg/kg 1260
10144403	ND
10144404	ND

The information in this report is being supplied to you at your request as 'Preliminary Results'. Results have not undergone the same level of review as a final report. Once all reviews have taken place, it is possible that results in the final report may vary from those in this report.

Megan Pickett
Chemist
U.S. EPA Region 10 Laboratory
Phone: (360) 871-8719
Fax: (360) 871-8747



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for PCB Aroclor Results from the Region 10 USEPA Laboratory

PROJECT NAME: ORRCO, Fuel Processors, Inc, Goshen-Eugene, OR

PROJECT CODE: OOO-145B

FROM: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment
USEPA Region 10 Laboratory

TO: Bruce Long
Office of Compliance and Enforcement
USEPA Region 10

I have authorized release of this data package. Attached you will find the PCB Aroclor analysis results for the ORRCO, Fuel Processors, Inc, Goshen-Eugene, OR samples collected on 04/09/10. For further information regarding the attached data, please contact Chris Pace at 360-871-8703. For the schedule of the remaining analyses, contact me at 360-871-8728.

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description: 01- TRUCK 0106-HI-37-299

Collected: 4/9/10 10:58:00
Matrix: Oil
Sample Number: 10144400
Type: Reg sample

		Result	Units	Qlfr
ORG				
Parameter	: Polychlorinated Biphenyl	Container ID : N1		
Method	: 8082 Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method	: 3580A 3580A Serial Dilution	Prep Date : 4/21/2010		
Analytes(s): 12674112		PCB-1016	1.2	mg/kg U
11104282		PCB-1221	1.2	mg/kg U
11141165		PCB-1232	2.4	mg/kg U
53469219		PCB-1242	1.2	mg/kg U
12672296		PCB-1248	1.2	mg/kg U
11097691		PCB-1254	1.2	mg/kg U
11096825		PCB-1260	1.2	mg/kg U
Surrogate(s): *2051243		Decachlorobiphenyl	62	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description:

Collected:
Matrix: Oil
Sample Number: 10144400
Type: Matrix Spike

		Result	Units	Qlfr
ORG				
Parameter	: Polychlorinated Biphenyl			Container ID : N1
Method	: 8082 Polychlorinated Biphenyls (PCBs/congeners) by GC			Analysis Date : 4/21/2010
Prep Method	: 3580A 3580A Serial Dilution			Prep Date : 4/21/2010
Surrogate(s)	*2051243 Decachlorobiphenyl	62	%Rec	
	12674112 PCB-1016	68	%Rec	
	11096825 PCB-1260	44	%Rec	

5/7/10

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

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Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description:

Collected:
Matrix: Oil
Sample Number: 10144400
Type: Matrix Spike Dupl

		Result	Units	Qlfr
ORG				
Parameter	: Polychlorinated Biphenyl	Container ID : N1		
Method	: 8082 Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method	: 3580A 3580A Serial Dilution	Prep Date : 4/21/2010		
Surrogate(s) :	*2051243 Decachlorobiphenyl	62	%Rec	
	12674112 PCB-1016	64	%Rec	
	11096825 PCB-1260	43	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description: 02- BLUE TANK

Collected: 4/9/10 11:10:00
Matrix: Oil
Sample Number: 10144401
Type: Reg sample

		Result	Units	Qlfr
ORG				
Parameter : Polychlorinated Biphenyl		Container ID : N1		
Method : 8082	Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method : 3580A	3580A Serial Dilution	Prep Date : 4/21/2010		
Analytes(s): 12674112		PCB-1016	1.2	mg/kg U
11104282		PCB-1221	1.2	mg/kg U
11141165		PCB-1232	2.5	mg/kg U
53469219		PCB-1242	1.2	mg/kg U
12672296		PCB-1248	1.2	mg/kg U
11097691		PCB-1254	1.2	mg/kg U
11096825		PCB-1260	1.5	mg/kg
Surrogate(s) : *2051243		Decachlorobiphenyl	76	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description: 03-20K TANK (BLACK)

Collected: 4/9/10 11:15:00
Matrix: Oil
Sample Number: 10144402
Type: Reg sample

		Result	Units	Qlfr
ORG				
Parameter : Polychlorinated Biphenyl		Container ID : N1		
Method : 8082	Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method : 3580A	3580A Serial Dilution	Prep Date : 4/21/2010		
Analytes(s): 12674112		23	mg/kg	U
11104282		23	mg/kg	U
11141165		47	mg/kg	U
53469219		23	mg/kg	U
12672296		23	mg/kg	U
11097691		23	mg/kg	U
11096825		160	mg/kg	
Surrogate(s) : *2051243		77	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description:

Collected:
Matrix: Oil
Sample Number: 10144402
Type: Duplicate

		Result	Units	Qlfr
ORG				
Parameter	: Polychlorinated Biphenyl	Container ID : N1		
Method	: 8082 Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method	: 3580A 3580A Serial Dilution	Prep Date : 4/21/2010		
Analytes(s): 12674112		PCB-1016	25	mg/kg U
11104282		PCB-1221	25	mg/kg U
11141165		PCB-1232	49	mg/kg U
53469219		PCB-1242	25	mg/kg U
12672296		PCB-1248	25	mg/kg U
11097691		PCB-1254	25	mg/kg U
11096825		PCB-1260	170	mg/kg
Surrogate(s): *2051243		Decachlorobiphenyl	68	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description: 04- GREEN TANK

Collected: 4/9/10 11:25:00
Matrix: Oil
Sample Number: 10144403
Type: Reg sample

		Result	Units	Qlfr	
ORG					
Parameter	: Polychlorinated Biphenyl		Container ID : N1		
Method	: 8082	Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method	: 3580A	3580A Serial Dilution	Prep Date : 4/21/2010		
Analytes(s):	12674112	PCB-1016	12	mg/kg	U
	11104282	PCB-1221	12	mg/kg	U
	11141165	PCB-1232	24	mg/kg	U
	53469219	PCB-1242	12	mg/kg	U
	12672296	PCB-1248	12	mg/kg	U
	11097691	PCB-1254	12	mg/kg	U
	11096825	PCB-1260	12	mg/kg	U
Surrogate(s):	*2051243	Decachlorobiphenyl	67	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description: 05- YELLOW TANK

Collected: 4/9/10 11:30:00
Matrix: Oil
Sample Number: 10144404
Type: Reg sample

		Result	Units	Qlfr
ORG				
Parameter : Polychlorinated Biphenyl		Container ID : N1		
Method : 8082	Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method : 3580A	3580A Serial Dilution	Prep Date : 4/21/2010		
Analytes(s): 12674112	PCB-1016	12	mg/kg	U
11104282	PCB-1221	12	mg/kg	U
11141165	PCB-1232	24	mg/kg	U
53469219	PCB-1242	12	mg/kg	U
12672296	PCB-1248	12	mg/kg	U
11097691	PCB-1254	12	mg/kg	U
11096825	PCB-1260	12	mg/kg	U
Surrogate(s): *2051243	Decachlorobiphenyl	65	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description:

Collected:
Matrix: Oil
Sample Number: OBO0111B1
Type: Blank

		Result	Units	Qlfr
ORG				
Parameter : Polychlorinated Biphenyl		Container ID : 0		
Method : 8082	Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method : 3580A	3580A Serial Dilution	Prep Date : 4/21/2010		
Analytes(s): 12674112		1.3	mg/kg	U
11104282		1.3	mg/kg	U
11141165		2.5	mg/kg	U
53469219		1.3	mg/kg	U
12672296		1.3	mg/kg	U
11097691		1.3	mg/kg	U
11096825		1.3	mg/kg	U
Surrogate(s): *2051243		111	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description:

Collected:
Matrix: Oil
Sample Number: OBO0111F1
Type: LCS

		Result	Units	Qlfr
ORG				
Parameter	: Polychlorinated Biphenyl	Container ID : 0		
Method	: 8082 Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method	: 3580A 3580A Serial Dilution	Prep Date : 4/21/2010		
Surrogate(s):	*2051243 Decachlorobiphenyl	118	%Rec	
	12674112 PCB-1016	81	%Rec	
	11096825 PCB-1260	100	%Rec	

5/7/10

Manchester Environmental Laboratory
Report by Parameter for Project OOO-145B

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Project Code: OOO-145B
Project Name: ORRCO FUEL PROCESSORS
Project Officer: BRUCE LONG
Account Code: 1011B10P201B53C
Station Description:

Collected:
Matrix: Oil
Sample Number: OBO0111F2
Type: LCSD

		Result	Units	Qlfr
ORG				
Parameter : Polychlorinated Biphenyl		Container ID : 0		
Method : 8082	Polychlorinated Biphenyls (PCBs/congeners) by GC	Analysis Date : 4/21/2010		
Prep Method : 3580A	3580A Serial Dilution	Prep Date : 4/21/2010		
Surrogate(s) : *2051243	Decachlorobiphenyl	116	%Rec	
12674112	PCB-1016	80	%Rec	
11096825	PCB-1260	100	%Rec	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM
FOR ORGANIC CHEMICAL ANALYSES

Date: May 5, 2010

To: Bruce Long, Project Manager
Office of compliance and Enforcement, USEPA Region 10

From: Chris Pace, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the PCB Aroclor Analysis of Samples from the ORRCO Fuel Processors, Inc, Goshen-Eugene, OR

Project Code: OOO-145B
Account Code: 20102011B10P201B53C

The following is a quality assurance review of the data for PCB Aroclor analysis samples from the above referenced site. The analyses were performed by EPA Region 10 Laboratory Chemists following US EPA Laboratory guidelines.

This review was conducted for the following samples:

10144400 10144401 10144402 10144403 10144404

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

All measures of quality control met Laboratory/QAPP criteria.

For those tests for which the EPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met.

2. Sample Holding Times

Upon sample receipt, no conditions were noted that would impact data quality.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples and extracts. Extracts were analyzed within 40 days of preparation. No qualifiers were applied based on holding times.

4. Sample Preparation

Samples were prepared according to the method.

5. Initial Calibration/Continuing Calibration Verification (CCV)

Initial calibrations were performed on 03/29/10 and 04/06/10. Calibration curves met the coefficient of determination criteria.

The CCV for reported samples met the criteria for frequency of analysis and relative retention time (RRT) windows. The percent accuracies met the criteria of 80-120% of the true value.

6. Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD)

LCS/LCSD are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the criteria of 70-130% with a relative percent difference $\leq 50\%$.

7. Blank Analysis

Method blanks were analyzed with each sample batch to evaluate the potential for laboratory contamination and effects on the sample results. Target analytes were not detected in method blanks.

8. Surrogate Spikes

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. The surrogate compound used for these analyses was decachlorobiphenyl. All surrogate recoveries were within the criteria of 50-150%.

9. Matrix Spike/Matrix Spike Duplicate Analysis (MS/MSD)

MS/MSD analyses are performed to provide information on the effects of sample matrices toward the analytical method. An MS/MSD analysis was performed using samples 10144400 (S1/S2). The MS/MSD recoveries were within the criteria of 30-150% with a relative percent difference $\leq 50\%$.

10. Compound Quantitation

The initial calibration functions were used for calculations. Reported quantitation limits were based on the initial calibration standards and sample size used for the analysis.

Sample 10144402 was prepared and analyzed in duplicate. The duplicate results were $\leq 50\%$.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

11. Identification

PCBs and the surrogate were identified based on chromatographic retention times of two dissimilar gas chromatography columns as determined from the initial calibration.

12. Changes from Preliminary Data

No changes to the pentachlorophenol results were made between the preliminary and final data.

13. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871 - 8703.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. <u>No value is reported with this qualification.</u>
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. <u>No value is reported with this qualification.</u>

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

(Provide at least three copies to the airline.)

ShipperUSEPA Oregon Operations Office
805 SW Broadway
Suite 500
Portland, Oregon 97205

Air Waybill No.

Page 1 of 1 Pages

Shipper's Reference Number

ConsigneeUSEPA Region 10 Lab
7411 Beach Drive East
Port Orchard, Washington 98366*Two completed and signed copies of this Declaration must be handed to the operator***WARNING****Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.****TRANSPORT DETAILS**This shipment is within the limitations prescribed for:
(delete non applicable)

Airport of Departure

Portland, Oregon

PASSENGER
AND CARGO
AIRCRAFT~~CARGO
AIRCRAFT
ONLY~~

Airport of Destination:

Seattle, Washington

Shipment type: (delete non-applicable)

☐ NON-RADIOACTIVE☒ RADIOACTIVE**NATURE AND QUANTITY OF DANGEROUS GOODS****Dangerous Goods Identification**

UN or ID No.	Proper Shipping Name	Class or Division (Subsidiary Risk)	Pack- ing Group	Quantity and type of packaging	Packing Inst.	Authorization
UN 2315	Polychlorinated biphenyls, liquid	9	II	1-1A2 Steel Drum X 50 ml	907	

Additional Handling Information

Inner Packaging Complies with IATA

FX-06 Applies as this is suspected to contain PCBs.

Emergency Telephone Number 206-553-1263

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable International and National Governmental Regulations. I declare that all of the applicable air transport requirements have been met.

Name/Title of Signatory

Bruce Long, Investigator
Place and Date

Portland, Oregon April 20, 2010

Signature
(see warning above)

FOR RADIOACTIVE MATERIAL SHIPMENT ACCEPTABLE FOR PASSENGER AIRCRAFT, THE SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN OR INCIDENT TO RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT.

From: Origin ID: VKWA (503) 326-3686
 Bruce Long
 US EPA Oregon Operations Office
 805 SW Broadway

Portland, OR 97205

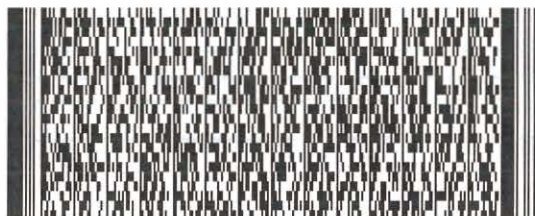


J1010100220224

SHIP TO: (360) 871-8760

BILL SENDER

Karen Norton
USEPA Region 10 Lab
7411 BEACH DR E
EAST
PORT ORCHARD, WA 98366



Ship Date: 20APR10
 ActWgt: 10.0 LB
 CAD: 101243433/INET3010

Dims: 1 X 14 X 22 IN

Delivery Address Bar Code



Ref # Samples
 Invoice #
 PO #
 Dept #

TRK# 7985 8541 9342
 0201

WED - 21 APR AM
 PRIORITY OVERNIGHT
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SEA

85 PWTA



505G1/DBF2/5FE8

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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Chain of Custody Record						Receiving Laboratory Information Condition of Samples upon Receipt at Lab:	
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	<div>GOOD</div>	
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time		
Relinquished by (Signature)	Date	Time	Received by Mobile Lab for Field Analysis (Signature)	Date	Time		
Shipped by (Signature)	Date	Time	Received for lab by (Signature)	Date	Time	Custody Seals Intact: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> none	
						Distribution: White - Laboratory Copy; Yellow - Regional Sample Control Center (RSCC) Copy; Pink - Field or Office Copy	

Leachate 50 Sludge 60 Air

use at the EPA Region 10 Laboratory. Pick the matrix code
If in the opinion of the sampler, the sample matrix needs to
write in a matrix description. Remember, tissue can be

**cross out one of the pre-printed analyses and write in
analyte symbol/abbreviation (some analyses are not**

form:

ions (these are a subset of the compounds reported from GC-
C or SIM-GC/MS methods are usually requested in order to get
chlorine Pesticides **PCB** Polychlorinated Biphenyls aka
organic compounds **BNA** (aka SVOC or SVOA) - semivolatile

in:

ominated hydrocarbons) **Butyltins** Butyltins (mono, di, tri,
ated Biphenyl Congener analysis **Chlor Hyd.** Chlorinated
ua/Cat Guaiacols/Catechols scan **Herb** Herbicides **OP Pest**
DE Polybrominated diphenylethers **Resin Acids** **TPH-Dx**
el range **TPH-Dx-ext** Total Petroleum Hydrocarbons, diesel
Gx Total Petroleum Hydrocarbons, gasoline range **TPH-HCID**
tification **THMs** Trihalomethanes

m (underlined = 'CLP metals' - mercury must be

enic **Ba** barium **Be** beryllium **B** boron **Cd** cadmium
alt **Cu** copper **Fe** iron **Pb** lead **Mg** magnesium
ckel **K** potassium **Se** selenium **Ag** silver **Na** sodium
n zinc

and then circled under the box used for

n **Mo** molybdenum **Sr** strontium **Ti** titanium **W** tungsten

alyzed for on matrices other than soil/sed or water.

printed on the form:

n Fecal Coliform **T. Coliform** Total Coliform

can be written in:

articulate Analysis for Determining GWUDI

hage **Staph a** Staphylococcus aureus

ing Procedure (TCLP) write in analyses³:

icides **TCLP met+Hg** TCLP metals including mercury
g mercury **TCLP Hg** TCLP mercury **TCLP Pest** TCLP

ected for analytes with a TCLP regulatory criteria.

General analyses pre-printed on the form:

BOD Biochemical Oxygen Demand **NO₂+NO₃** Nitrite plus Nitrate **Oil & Grease** **TDS** Total
Dissolved Solids **TSS** Total Suspended Solids

General analyses that can be written in:

Acidity **Alk** Alkalinity **TNH3** Ammonia **HCO₃** Bicarbonate **Br** Bromide **CO₃** Carbonate **COD**
Chemical Oxygen Demand **Cl** Chloride **Color** Color **Cond** Conductivity **CN** Cyanide **CN-**
W&D Cyanide, weak & dissociable **Flash** Flash Point **F** Fluoride **Grn Siz** Grain Size **Hard**
Hardness **NO₂** Nitrite **NO₃** Nitrate **TNVS** Non-Volatile Solids **NVSS** Non-Volatile Suspended
Solids **CLO₄** Perchlorate **pH** Phenol Phenolics **SiO₂** Silica - dissolved **SO₄** Sulfate **S** Sulfide
TOC Total Organic Carbon **TS** Total Solids **% V Sids** % Volatile Solids **TVS** Volatile Solids
TVSS Volatile Suspended Solids **SetSids** Settleable Solids **% Tot** % Total Solids **TKN** Total
Kjeldahl Nitrogen **T-Phos** Total Phosphorous **D-Phos** Dissolved Phosphorous **O-Phos** Ortho
Phosphorous **D-O-Phos** Dissolved Ortho Phosphorous **Turb** Turbidity

Container guidance.

*Note: this is general information only - consult the QA Project Plan on appropriate containers and
preservatives for each project. Modifying methods may require modifying the number/type of
containers. Freezing samples for one or more analyses may require collection of individual
containers. Contact the laboratory for minimum sample volumes in situations where sample
material is limited. Minimum volumes required for analysis will depend on the analysis and
required reporting limits.*

Containers for soil/sediment:

Metals/cyanide/mercury: 1, wide mouth 8 ounce glass or HDPE.

Extractable organics: 1, 8 ounce wide mouth amber glass, for one or two analyte groups

Inorganics and organics: 1, sixteen ounce wide mouth amber glass.

VOAs/purgeables: Contact the laboratory for the proper number/type of special Closed-System
sample containers.

Containers/chemical preservatives for water⁴:

Metals/regular mercury: 1, one liter HDPE, HNO₃ to pH<2

Mercury by method 1631: HCl and 250 mL containers provided by MEL

Cyanide: 1, 250 mL or larger HDPE, remove sulfides and/or residual chlorine then add NaOH to
pH>12

Extractable organics (BNA, Pest, PCP, PAH etc.): two, one liter amber glass containers for each
analysis - if more than one liter will be extracted for the project, it is advisable that the container
size match (but not exceed) the volume to be extracted. Two separate volumes are usually
collected for each analysis to allow for re-extraction if needed.

VOAs/purgeables: 3, zero headspace 40 mL amber glass vials with Teflon Septa, remove residual
chlorine then add HCl to pH<2

Alkalinity: 1, 250 mL or larger HDPE, no extra volume for lab QC

Ammonia: 1, 250 mL or larger HDPE, H₂SO₄ to pH<2, no extra volume for lab QC

BOD 5: 1, one gallon HDPE, no extra volume for lab QC

TSS: 1, one liter or larger HDPE, no extra volume for lab QC

TDS: 1, 250 mL or larger HDPE, no extra volume for lab QC

Oil & Grease: 1, one liter clear glass, HCl to pH<2, submit 4 separate containers for the lab QC
sample

NO₂+NO₃: 1, 250 mL or larger HDPE, H₂SO₄ to pH<2, no extra volume for lab QC

Br, Cl, F, SO₄, CLO₄: for analysis by ion chromatography, 1, 100 mL or larger HDPE, no extra
volume for lab QC

⁴ Water samples to be designated for lab QC should have double volume submitted for metals,
triple volume for organics. In general, extra volume is usually not required for lab QC for soil/
sediment.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, March 12, 2010

Ame LeCocq
Oil Re-Refining Co.
4150 N. Suttle Rd.
Portland, OR 97217

RE: Goshen Project / [none]

Enclosed are the results of analyses for work order A10C152, which was received by the laboratory on 3/11/2010 at 3:50:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 1 of 7

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Oil Re-Refining Co.
4150 N. Suttle Rd.
Portland, OR 97217

Project: Goshen Project
Project Number: [none]
Project Manager: Ame LeCocq

Reported:
03/12/10 14:58

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Schnitzer Steel - Tank	A10C152-01	Oil	03/11/10 09:00	03/11/10 15:50
Schnitzer Steel - Barrel Composite	A10C152-02	Oil	03/11/10 09:00	03/11/10 15:50
Pacific Recycling - Tank Truck	A10C152-03	Oil	03/11/10 09:30	03/11/10 15:50

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DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 2 of 7

Oil Re-Refining Co.

4150 N. Suttle Rd.

Portland, OR 97217

Project: Goshen Project

Project Number: [none]

Project Manager: Ame LeCocq

Reported:

03/12/10 14:58

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Schnitzer Steel - Tank (A10C152-01)			Matrix: Oil		Batch: 1003228			C-07
Aroclor 1016	ND	---	0.888	mg/kg	1	03/11/10 23:52	EPA 8082A	
Aroclor 1221	ND	---	0.888	"	"	"	"	
Aroclor 1232	ND	---	0.888	"	"	"	"	
Aroclor 1242	ND	---	0.888	"	"	"	"	
Aroclor 1248	ND	---	0.888	"	"	"	"	
Aroclor 1254	ND	---	0.888	"	"	"	"	
Aroclor 1260	ND	---	0.888	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			Recovery: 72 %	Limits: 50-125 %	"	"	"	
Decachlorobiphenyl (Surr)			117 %	Limits: 55-130 %	"	"	"	
Schnitzer Steel - Barrel Composite (A10C152-02)			Matrix: Oil		Batch: 1003228			C-07
Aroclor 1016	ND	---	0.773	mg/kg	1	03/12/10 00:06	EPA 8082A	
Aroclor 1221	ND	---	0.773	"	"	"	"	
Aroclor 1232	ND	---	0.773	"	"	"	"	
Aroclor 1242	ND	---	0.773	"	"	"	"	
Aroclor 1248	ND	---	0.773	"	"	"	"	
Aroclor 1254	ND	---	0.773	"	"	"	"	
Aroclor 1260	ND	---	0.773	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			Recovery: 80 %	Limits: 50-125 %	"	"	"	
Decachlorobiphenyl (Surr)			111 %	Limits: 55-130 %	"	"	"	
Pacific Recycling - Tank Truck (A10C152-03RE1)			Matrix: Oil		Batch: 1003228			C-07
Aroclor 1016	ND	---	14.2	mg/kg	20	03/12/10 12:40	EPA 8082A	
Aroclor 1221	ND	---	14.2	"	"	"	"	
Aroclor 1232	ND	---	14.2	"	"	"	"	
Aroclor 1242	ND	---	14.2	"	"	"	"	
Aroclor 1248	ND	---	14.2	"	"	"	"	
Aroclor 1254	ND	---	14.2	"	"	"	"	
Aroclor 1260	288	---	14.2	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			Recovery: 94 %	Limits: 50-125 %	"	"	"	
Decachlorobiphenyl (Surr)			127 %	Limits: 55-130 %	"	"	"	

DRAFT REPORT

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Oil Re-Refining Co.
4150 N. Suttle Rd.
Portland, OR 97217

Project: Goshen Project
Project Number: [none]
Project Manager: Ame LeCocq

Reported:
03/12/10 14:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

DRAFT REPORT

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Apex Labs

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503-718-2323 Phone
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Oil Re-Refining Co.
4150 N. Suttle Rd.
Portland, OR 97217

Project: Goshen Project
Project Number: [none]
Project Manager: Ame LeCocq

Reported:
03/12/10 14:58

SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3580A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1003228							
A10C152-01	Oil	EPA 8082A	03/11/10 09:00	03/11/10 16:50	0.169g/5mL	0.15g/5mL	0.89
A10C152-02	Oil	EPA 8082A	03/11/10 09:00	03/11/10 16:50	0.194g/5mL	0.15g/5mL	0.77
A10C152-03RE1	Oil	EPA 8082A	03/11/10 09:30	03/11/10 16:50	0.212g/5mL	0.15g/5mL	0.71

DRAFT REPORT

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DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 5 of 7

Oil Re-Refining Co.
4150 N. Suttle Rd.
Portland, OR 97217

Project: Goshen Project
Project Number: [none]
Project Manager: Ame LeCocq

Reported:
03/12/10 14:58

Notes and Definitions

Qualifiers:

C-07 Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

Reported:
03/12/10 14:58

APEX LABS

251001A CDC 300 uf

Company: ORCO	Project Mgr. And Locsq	Project Name: <i>CONVEN PROJECT</i>	Project #
Address: 4146 Nares Sutte Road - Portland, Oregon - 97219		Phone: 503-286-8322	Ex: 503-286-3017
			Emit. energy

ANALYSIS REQUEST

[illegible]

SPECIAL INSTRUCTIONS

Nightly Turn Around Time (TAT) = 5-10 Business Days.

TAT Requested (circle)	4 DAY	5 DAY	Other:

ASAP PLEASE!!

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Name: <u>Amie L. Long</u> Title: <u>President</u> Date: <u>03-11-2010</u> Time: <u>1500</u>	Name: <u>[Signature]</u> Title: <u>[Signature]</u> Date: <u>3-11-</u> Time: <u>1515</u>	Name: <u>[Signature]</u> Title: <u>[Signature]</u> Date: <u>3-11-</u> Time: <u>1515</u>	Name: <u>[Signature]</u> Title: <u>[Signature]</u> Date: <u>3-11-</u> Time: <u>1515</u>
NAME: <u>LECOQ</u> Company: <u>[Signature]</u>	NAME: <u>Andersen</u> Company: <u>O. K. Andersen Co. Inc.</u>	NAME: <u>Andersen</u> Company: <u>O. K. Andersen Co. Inc.</u>	NAME: <u>[Signature]</u> Company: <u>[Signature]</u>

Company: ORRCO		Project Mgr. Ame LeCocq		Project Name: GOSHEN PROJECT		Project #																													
Address: 4150 North Suttle Road - Portland, Oregon - 97217				Phone: 503-286-8352		Fax: 503-286-5027		Email: amek@																											
Sampled by: MIKE MILLER				ANALYSIS REQUEST																															
SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs	8270 SIM PAHs	8082 PCBs	8081 Chlor. Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd Ca, Cr, Co, Cu, Fe, Pb Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Ti, V, Zn	TCLP Metals (8)	1200- COLS	1200-Z	FULL CHLORINATED SCAN	ORGANICS												
Schnitzer Steel-Tank		3/11/2010	900	O	1									X																					
Schnitzer Steel-Barrel Composite		3/11/2010	900	O	1									X																					
Pacific Recycling - Tank Truck		3/11/2010	930	O	1									X																					
Normal Turn Around Time (TAT) = 5-10 Business Days						SPECIAL INSTRUCTIONS:																													
TAT Requested (circle) 24 HR 48 HR 72 HR 4 DAY 5 DAY Other: _____						ASAP PLEASE!!																													
SAMPLES ARE HELD FOR 30 DAYS																																			
RELINQUISHED BY: Signature: Ame LeCocq Printed Name: AME LECOCQ Company: ORRCO						RECEIVED BY: Signature: [Signature] Printed Name: Melvin Anderson Company: Oil Re-refining Co. Inc.						RELINQUISHED BY: Signature: [Signature] Printed Name: Melvin Anderson Company: Oil Re-refining Co. Inc.						RECEIVED BY: Signature: [Signature] Printed Name: [Signature] Company: [Signature]																	
Date: 03-11-2010 Time: 1500						Date: 3-11-10 Time: 1515						Date: 3-11-10 Time: 1515						Date: 3-11-10 Time: 1515																	